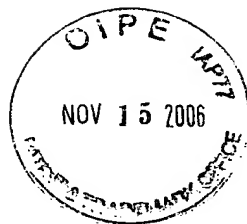


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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Semih Secer

Serial No.: 09/770,427

Examiner: LaShonda T. Jacobs

Filing Date: January 26, 2001

Group Art Unit: 2157

Title: System and Method for Managing a Communication Network Utilizing State-Based Polling

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria VA 22313-1450

TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT

Sir:

Transmitted herewith is/are the following in the above-identified application:

- ☒ Response/Amendment ☐ Petition to extend time to respond  
☐ New fee as calculated below ☐ Supplemental Declaration  
☐ No additional fee (Address envelope to "Mail Stop Amendments")  
☒ Other: Compliant Appeal Brief; 2 return postcards (Fee \$ )

CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY						
(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT	(3) NUMBER EXTRA	(4) HIGHEST NUMBER PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEES
TOTAL CLAIMS		MINUS		= 0	X 50	\$ 0
INDEP. CLAIMS		MINUS		= 0	X 200	\$ 0
<input type="checkbox"/> FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM					+ 360	\$ 0
EXTENSION FEE	1 <sup>ST</sup> MONTH 120.00 <input type="checkbox"/>	2 <sup>ND</sup> MONTH 450.00 <input type="checkbox"/>	3 <sup>RD</sup> MONTH 1020.00 <input type="checkbox"/>	4 <sup>TH</sup> MONTH 1590.00 <input type="checkbox"/>		\$ 0
OTHER FEES						\$ 0
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT						\$ 0

Charge \$ 0 to Deposit Account 50-1078. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 50-1078 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 50-1078 under 37 CFR 1.16, 1.17, 1.19, 1.20 and 1.21. A duplicate copy of this transmittal letter is enclosed.

Respectfully submitted,

Semih Secer

By

Jacob N. Erlich  
Attorney/Agent for Applicant(s)

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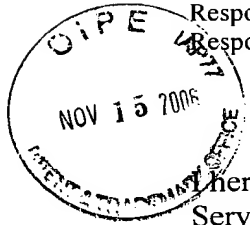
Date: November 13, 2006

Telephone No. 617-345-3000

Appl. Serial No.: 09/770,427

Response dated November 13, 2006

Response to Notice of Non-Compliant Appeal Brief of October 12, 2006



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Jacob N. Erlich

Reg. No. 24,338

### UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF APPEALS AND INTERFERENCES

Appl. No.:	09/770,427	Conf. No.:	7055
Filed:	January 26, 2001	TC/A.U.:	2157
Examiner:	Jacobs, LaShonda T.	Appellant:	Semih Secer
Docket No.:	10010614-1 (28579-198)	Customer No.:	022878
Title:	SYSTEM AND METHOD FOR MANAGING A COMMUNICATION NETWORK UTILIZING STATE-BASED POLLING		

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### **RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

Sir:

In response to the Notice of Non-Compliant Appeal Brief of October 12, 2006 (the "Notice"), please enter the attached full text of a compliant Appeal Brief which includes (1) thirteen sheets of drawings (pages 35-47); and (2) a Related Proceedings Appendix (page 48). The Notice indicates that pages 36-48 were omitted from the originally-filed Appeal Brief. Applicants contend that these items were included in the original submission of the Appeal Brief on September 29, 2006, as evidenced by the stamped return postcard showing that pages 1-48 were received by the USPTO on October 2, 2006 (copy attached). However, in order to complete this response, Applicants resubmit their entire Appeal Brief in full.

Appl. Serial No.: 09/770,427

Response dated November 13, 2006

Response to Notice of Non-Compliant Appeal Brief of October 12, 2006

In accordance with M.P.E.P. §714.01, the following information is presented in the event that a call may be deemed desirable by the Examiner:

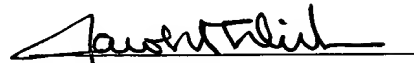
JACOB N. ERLICH

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Dated: November 13, 2006

Respectfully submitted  
on behalf of Appellant,

By:



Jacob N. Erlich

Reg. No. 24,338

Attorney for Appellant

01072512



**COPY**

**USPTO TRANSMITTAL POSTCARD (Patent)**

Mailing date:	September 29, 2006	Docket No.	28579-198
Serial No.:	09/770,427	Filing Date:	January 26, 2001
Applicant(s):	Semih Secer	Group Art Unit	2157
Title: System and Method for Managing A Communication Network			

*The following were received in the U.S. Patent and Trademark Office on the date stamped hereon*

1. A Transmittal of Appeal Brief with Certificate of Mailing *in duplicate* (2 total pages);
2. An Appeal Brief under 37 C.F.R. § 41.37 with Certificate of Mailing (48 pages);
3. Two return-receipt postcards

\*Agilent Docket No. 10010614-1  
Atty/Sec: JNE/jyc



10/10/06 Docketed as R0101



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Jacob N. Erlich  
Reg. No. 24,338

### UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF APPEALS AND INTERFERENCES

Appl. No.:	09/770,427	Conf. No.:	7055
Filed:	January 26, 2001	TC/A.U.:	2157
Examiner:	Jacobs, LaShonda T.	Appellant:	Semih Secer
Docket No.:	10010614-1 (28579-198)	Customer No.:	022878
Title:	SYSTEM AND METHOD FOR MANAGING A COMMUNICATION NETWORK UTILIZING STATE-BASED POLLING		

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### **APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

Sir:

This is an appeal from the Final Rejection dated May 31, 2006 (Final Rejection), of claims 1-35, 37-64 in the above-identified application. The Appeal Brief was timely filed, being filed on or before October 2, 2006, two months from the date the Notice of Appeal was received by the USPTO. Should any further fees be due, the Director of Patents and Trademarks is hereby authorized to charge them, or to credit any overpayment of fees, to Deposit Account No. 50-1078.

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**I. REAL PARTY IN INTEREST**

The real party in interest is the Assignee, Agilent Technologies, Inc., having offices at Loveland, CO.

**II. RELATED APPEALS AND INTERFERENCES**

None.

**III. STATUS OF CLAIMS**

Original claims 1-35 and 37-63 together with added claim 64, remain pending in this application. Claims 1, 35, 48, 59, and 64 are independent claims. Claim 36 was previously cancelled without prejudice. Claims 1-35 and 37-64 stand rejected under 35 U.S.C. § 102(e). Claims 22, 26, 47, 58, and 63 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

The claims currently on appeal are claims 1-21, 23-25, 27-35, 37-46, 48-57, 59-62, and 64. Independent claims 1, 35, 48, 59, and 64, and dependent claims 6, 7, 11-18, 21, 28-33, 38-43, 49, 51-55, 57, and 60-62 are argued separately. Dependent claims 2-5, 8-10, 19, 20, 23-25, 27, 34, 37, 44, 45, 50, and 56 have not been argued separately, but are considered patentable by virtue of the patentability of the independent claims upon which they depend, 1, 35, and 48. A copy of the claims on appeal is provided in the Claims Appendix. Dependent claims 22, 26, 47, 58, and 63, which contain allowable subject matter, are listed in Claims Appendix but not described in Section V nor argued in Section VI.

**IV. STATUS OF AMENDMENTS**

The Response to the Office Action of March 20, 2006, has been entered. No response to the Final Rejection of May 31, 2006 was filed. The amended claims as entered from the Office Action of March 20, 2006, are the claims argued in this appeal brief and which appear in the Claims Appendix of this appeal brief.

**V. SUMMARY OF CLAIMED SUBJECT MATTER<sup>1</sup>**

Independent claim 1 claims a method for implementing a state model for managing a network (Appellant's Specification, page 14, lines 2-3) coupled to a central management system (Appellant's Specification, page 14, line 10, FIG. 10, ref. # 1002) including the steps of (a) presenting a user interface (Appellant's Specification, page 14, line 5) for said central management system to enable a user to define at least one state model (Appellant's Specification, FIGs. 9B and 9C) for managing said at least one network element based on a determined state of said at least one network element (Appellant's Specification, page 14, lines 2-4), (b) presenting a user interface for said central management system to enable a user to define at least one poll service (Appellant's Specification, page 14, lines 12-13, FIG. 9A) that includes at least one of said at least one state model (Appellant's Specification, page 14, lines 6-7, FIG. 9A), and (c) executing said at least one poll service to manage said at least one network element (Appellant's Specification, page 14, lines 8-9, FIG. 8, ref. # 808).

Dependent claim 2 claims the method of claim 1 including the steps of (a) distributing said at least one poll service to at least one distributed polling gateway (Appellant's Specification, page 14, lines 12-13, 24-25) that is communicatively coupled with said at least one network element (Appellant's Specification, FIG. 10, ref. #s 1003-1007), and (b) communicatively coupling said user interface to said at least one distributed polling gateway (Appellant's Specification, page 26, lines 12-16).

Dependent claim 3 claims the method of claim 1 including the step of distributing said at least one poll service defined by said user to at least one distributed polling gateway for execution thereon (Appellant's Specification, page 26, lines 12-16).

Dependent claim 4 claims the method of claim 1 including the step of distributing said at least one poll service defined by said user to a plurality of distributed polling gateways for execution thereon (Appellant's Specification, page 26, lines 12-16).

Dependent claim 5 claims the method of claim 4 wherein the plurality of distributed polling gateways each have the ability to communicate with one or more network elements in a particular one of communication protocols selected from the group consisting of: SNMP protocol and CMIP protocol (Appellant's Specification, page 25, lines 20-26).

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<sup>1</sup> Including only claims under appeal.



Dependent claim 6 claims the method of claim 3 wherein the at least one distributed polling gateway filters data for the central management system (Appellant's Specification, page 26, lines 5-11).

Dependent claim 7 claims the method of claim 6 wherein the at least one distributed polling gateway only communicates data satisfying the at least one state model to the central management system (Appellant's Specification, page 26, lines 5-11).

Dependent claim 8 claims the method of claim 3 wherein the at least one distributed polling gateway executes software to evaluate a user-defined state model condition to determine whether to execute each of the at least one state model (Appellant's Specification, page 14, line 21 – page 15 line 4).

Dependent claim 9 claims the method of claim 8 wherein the state model condition specifies that the at least one state model is to be executed only for particular network elements (Appellant's Specification, page 15 lines 1-2).

Dependent claim 10 claims the method of claim 3 wherein the at least one distributed polling gateway operates to retrieve from the at least one network element needed values for values defined for the at least one state model (Appellant's Specification, page 14 lines 15-20).

Dependent claim 11 claims the method of claim 10 wherein the at least one distributed polling gateway executes software to evaluate one or more user-defined equations (Appellant's Specification, FIG. 9B, ref. # 931) for the at least one state model utilizing the retrieved variable values (Appellant's Specification, page 23 line 1 – page 25 line 8).

Dependent claim 12 claims the method of claim 3 wherein the at least one distributed polling gateway executes software to evaluate one or more user-defined state transition conditions for said at least one state model to determine whether said one or more user-defined state transition conditions are satisfied (Appellant's Specification, page 15 lines 5-24).

Dependent claim 13 claims the method of claim 12 wherein if the at least one distributed polling gateway determines that said one or more user-defined state transition conditions are not satisfied, then the state of said at least one network element remains unchanged (Appellant's Specification, page 15 lines 5-24).

Dependent claim 14 claims the method of claim 12 wherein if the at least one distributed polling gateway determines that the one or more user-defined state transition conditions are satisfied, then a state transition for the at least one network element is triggered (Appellant's Specification, page 15 lines 5-24).

Dependent claim 15 claims the method of claim 14 wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition (Appellant's Specification, page 15 lines 5-24).

Dependent claim 16 claims the method of claim 12 wherein if said at least one distributed polling gateway determines that said one or more user-defined state transition conditions are satisfied in a user-defined number of consecutive polls of said at least one network element, then a state transition for said at least one network element is triggered (Appellant's Specification, page 15 lines 11-13).

Dependent claim 17 claims the method of claim 16 wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition (Appellant's Specification, page 15 lines 14-24).

Dependent claim 18 claims the method of claim 1 wherein the step of presenting a user interface on a management system to enable a user to define at least one state model includes the steps of (a) providing a user interface that allows a user to define a plurality of states (Appellant's Specification, FIG. 9B) within a state model for a network element, (b) providing a user interface that allows a user to define at least one transition condition that specifies when a transition from one of said plurality of states to another of said plurality of states is to occur (Appellant's Specification, FIG. 9D, ref. # 963), and (c) providing a user interface that allows a user to define at least one transition action to be performed upon the occurrence of said transition (Appellant's Specification, FIG. 9E, ref. # 987).

Dependent claim 19 claims the method of claim 1 including a further step of correlating various different models of said at least one state model (Appellant's Specification, page 15 lines 25-28).

Dependent claim 20 claims the method of claim 19 wherein software code executes on the at least one distributed polling gateway communicatively coupled to the central management system to perform said step of correlating (Appellant's Specification, page 43 lines 1-4).

Dependent claim 21 claims the method of claim 20 wherein the software code triggers an action based upon a user-defined pattern of states of said various different models being achieved (Appellant's Specification, page 42 lines 15-24).

Dependent claim 23 claims the method of claim 1 wherein the at least one network element is selected from the group consisting of ATM, Sonet, router, modem, CMIP EMS, switch, OSS, NMS, and web server (Appellant's Specification, page 25 line 25).

Dependent claim 24 claims the method of claim 1 wherein the user interface is a graphical user interface (Appellant's Specification, page 14 lines 4-5).

Dependent claim 25 claims the method of claim 1 wherein the at least one state model includes (a) software code specifying at least two user-defined states for said at least one network element (Appellant's Specification, page 28 lines 14-15), (b) software code specifying at least one transition from a first of said at least two user-defined states to a second of said at least two user-defined states (Appellant's Specification, page 28 lines 19-20), and (c) software code specifying at least one transition action to be performed upon the occurrence of said at least one transition (Appellant's Specification, page 28 line 21 – page 29 line 2).

Dependent claim 27 claims the method of claim 25 wherein the transition action includes any one or more selected from the group consisting of enabling a particular poll service for the at least one network element, disabling the particular poll service for the at least one network element, enabling a particular state model for the at least one network element, disabling the particular state model for the at least one network element, and triggering one or more user-defined commands to be executed (Appellant's Specification, page 15 lines 19-22).

Dependent claim 28 claims the method of claim 1 wherein the step of executing the at least one poll service further includes triggering execution of said at least one poll service in response to the occurrence of a user-defined event (Appellant's Specification, page 40 line 19 – page 42 line 4, FIG. 9E).

Dependent claim 29 claims the method of claim 28 wherein said user-defined event includes a particular fault condition defined by a user (Appellant's Specification, page 23 lines 15-24, FIG. 3A).

Dependent claim 30 claims the method of claim 1 wherein the at least one poll service is executed only if a user-defined activation condition for said at least one poll service is satisfied (Appellant's Specification, page 14 lines 21-23).

Dependent claim 31 claims the method of claim 30 wherein the user-defined activation condition specifies that the poll service is for a particular type of network element (Appellant's Specification, page 14 lines 23-24).

Dependent claim 32 claims the method of claim 1 wherein the central management system enables a user to dynamically define the at least one poll service during runtime (Appellant's Specification, page 16 lines 5-9).

Dependent claim 33 claims the method of claim 1 wherein the central management system enables a user to dynamically define the at least one state model during runtime (Appellant's Specification, page 16 lines 5-9).

Dependent claim 34 claims the method of claim 1 wherein the central management system enables a user to dynamically modify an existing poll service or state model during runtime (Appellant's Specification, page 16 lines 5-9).

Independent claim 35 claims a method for enabling state-based management of a network, wherein network elements are managed based on their state, that includes the steps of (a) receiving input from a user at a management system to define at least one state model for managing at least one network element based on a determined state of said at least one network element (Appellant's Specification, FIGs. 9B and 9C), (b) receiving input from a user at said management system to define at least one poll service that includes at least one of said at least one state model (Appellant's Specification, FIG. 9A), (c) distributing said at least one poll service including said at least one state model to at least one distributed polling gateway that is communicatively coupled with said at least one network element (Appellant's Specification, page 26, lines 5-11), and (d) executing said at least one poll service at said at least one distributed polling gateway to manage said at least one network element (Appellant's Specification, page 14, lines 8-9, FIG. 8, ref. # 808), wherein said management system is a central management system that is communicatively coupled to said at least one distributed polling gateway (Appellant's Specification, page 14, line 10, FIG. 10, ref. # 1002).

Dependent claim 37 claims the method of claim 35 that further includes the step of distributing said at least one poll service defined by said user to said at least one distributed polling gateway for execution thereon (Appellant's Specification, page 26, lines 5-11).

Dependent claim 38 claims the method of claim 37 wherein said at least one distributed polling gateway filters data for said central management system (Appellant's Specification, page 26, lines 5-11).

Dependent claim 39 claims the method of claim 38 wherein said at least one distributed polling gateway only communicates data satisfying said at least one state model to said central management system (Appellant's Specification, page 14, lines 16-20).

Dependent claim 40 claims the method of claim 37 wherein the at least one distributed polling gateway executes software to evaluate one or more user-defined state transition conditions for the at least one state model to determine whether the one or more user-defined state transition conditions are satisfied (Appellant's Specification, page 15, lines 5-13).

Dependent claim 41 claims the method of claim 40 wherein if the at least one distributed polling gateway determines that the one or more user-defined state transition conditions are satisfied, then a state transition for the at least one network element is triggered (Appellant's Specification, page 15, lines 5-13).

Dependent claim 42 claims the method of claim 41 wherein one or more user-defined transition actions for the state transition are triggered in response to the state transition (Appellant's Specification, page 15, lines 5-13).

Dependent claim 43 claims the method of claim 35 wherein the received input from the user to define the at least one state model includes (a) input to define a plurality of states within a state model for a network element (Appellant's Specification, FIG. 9C), (b) input to define at least one transition condition that specifies when a transition from one state to another state is to occur (Appellant's Specification, FIGs. 9D and 3A-4B), and (c) input to define at least one transition action to be performed upon the occurrence of said at least one transition (Appellant's Specification, FIGs. 9D and 3A-4B).

Dependent claim 44 claims the method of claim 35 further including the step of correlating various models from said at least one state model (Appellant's Specification, page 15, lines 25-28, FIGs. 6 and 11A).

Dependent claim 45 claims the method of claim 44 wherein software code executes on said at least one distributed polling gateway communicatively coupled to said central management system to perform said step of correlating (Appellant's Specification, page 42, line 5 – page 43 line 4).

Dependent claim 46 claims the method of claim 45 wherein the software code triggers an action based upon a user-defined pattern of states of the various models being achieved (Appellant's Specification, page 42, lines 11-14).

Independent claim 48 claims a system for managing network elements based on their state that includes (a) at least one network element (Appellant's Specification, page 10, lines 1-4, FIG. 5), (b) one or more distributed gateways for monitoring said at least one network element, said one or more distributed gateways communicatively coupled to a central management system between said at least one network element and said central management system (Appellant's Specification, page 14, lines 10-11, FIG. 5), and (c) at least one state model executing on said one or more distributed gateways for managing said at least one network element based on a determined state of said at least one network element (Appellant's Specification, page 14, lines 11-20), said at least one state model capable of being dynamically defined during runtime (Appellant's Specification, page 16, lines 5-9).

Dependent claim 49 claims the system of claim 48 further including software executing on the central management system to enable a user to define the at least one state model, wherein once a user defines the at least one state model, it is communicated to the one or more distributed gateways for execution thereon (Appellant's Specification, page 14, lines 10-20, FIGs. 9B and 9C).

Dependent claim 50 claims the system of claim 48 wherein the one or more distributed gateways further include at least one user-defined poll service that includes one or more of the at least one state model (Appellant's Specification, page 14, lines 10-20).

Dependent claim 51 claims the system of claim 50 further including software executing on said central management system to enable a user to define the at least one poll service (Appellant's Specification, FIG. 9A), wherein once a user defines the at least one poll service, it is communicated to the one or more distributed gateways for execution thereon (Appellant's Specification, page 14, lines 11-14).

Dependent claim 52 claims the system of claim 48 wherein the one or more distributed polling gateways only communicate data satisfying the at least one state model to said central management system (Appellant's Specification, page 14, lines 16-20).

Dependent claim 53 claims the system of claim 48 wherein the one or more distributed polling gateways execute software to evaluate one or more user-defined state transition conditions for the at least one state model to determine whether the one or more user-defined state transition conditions are satisfied (Appellant's Specification, page 15, lines 5-8).

Dependent claim 54 claims the system of claim 53 wherein if the one or more distributed polling gateways determine that the one or more user-defined state transition conditions are satisfied, then a state transition for the at least one network element is triggered (Appellant's Specification, page 15, lines 9-11).

Dependent claim 55 claims the system of claim 54 wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition (Appellant's Specification, page 15, lines 14-16).

Dependent claim 56 claims the system of claim 48 wherein said one or more distributed polling gateways further includes at least one pattern-based state model executing thereon to correlate various of the at least one state model (Appellant's Specification, page 15, line 25 – page 16, line 4).

Dependent claim 57 claims the system of claim 56 wherein said at least one pattern-based state model specifies a user-defined pattern of states of the various models (Appellant's Specification, page 15, line 25 – page 16, line 4), and wherein the at least one pattern-based state model triggers an action upon the user-defined pattern of states being achieved (Appellant's Specification, page 15, line 25 – page 16, line 4).

Independent claim 59 claims a method for performing state-based management of a network, wherein network elements are manageable based on their state through a central management system, including the steps of executing, on at least one distributed gateway located between the central management system and the network elements, at least one user-defined state model for managing at least one network element based on a determined state of the at least one network element (Appellant's Specification, page 14, lines 10-20), wherein the step of executing at least one user-defined state model includes (a) polling the at least one network element for data (Appellant's Specification, page 14, lines 21-24, page 26, lines 5-11), (b) evaluating the data to determine whether a user-defined state transition condition is satisfied (Appellant's Specification, page 27, lines 3-16), and (c) triggering a state transition if the user-defined state transition condition is satisfied for a user-defined number of

consecutive polls of the at least one network element (Appellant's Specification, page 15, lines 9-13).

Dependent claim 60 claims the method of claim 59 wherein the user-defined number of consecutive polls is a plurality of polls (Appellant's Specification, page 15, lines 9-13).

Dependent claim 61 claims the method of claim 59 further including the step of software executing on the central management system to enable a user to define the at least one state model (Appellant's Specification, FIGs. 9B and 9C) wherein once a user defines the at least one state model, it is communicated to one or more distributed gateways that are communicatively coupled to the central management system for execution on the one or more distributed gateways (Appellant's Specification, page 14, lines 10-15).

Dependent claim 62 claims the method of claim 59 wherein if the user-defined state transition condition is satisfied for a user-defined number of consecutive polls of said at least one network element, then one or more user-defined transition actions for the user defined state transition are triggered (Appellant's Specification, page 15, lines 14-24).

Independent claim 64 claims a system for managing at least one network element including (a) at least one network element, (b) at least one gateway for monitoring said at least one network element, said at least one gateway communicatively coupled to a central management system between said at least one network element and the central management system (Appellant's Specification, page 14, lines 21-24, FIG. 5), and (c) at least one state model executing on said at least one gateway for managing said at least one network element based on a determined state of said at least one network element (Appellant's Specification, page 10, lines 1-9, said at least one state model capable of being dynamically defined during runtime (Appellant's Specification, page 16, lines 5-9).

## **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The Examiner has rejected claims 1-35 and 37-64 under 35 U.S.C § 102 as being anticipated by Vaishnavi et al., U.S. Patent # 5,734,642, issued on March 31, 1998 (Vaishnavi). It is submitted that Vaishnavi does not anticipate Appellant's claimed invention for the following reasons.

(a) Vaishnavi does not anticipate Appellant's claimed user interface, input from a user, or user-defined state model (independent claims 1, 35, and 59 and dependent claim 24).



(b) Vaishnavi does not anticipate Appellant's claimed dynamic definition of a poll service or a state model during runtime (independent claims 48 and 64, and dependent claims 32, 33, 49, 51, and 61).

(c) Vaishnavi does not anticipate Appellant's claimed user-defined state transition conditions (independent claim 59 and dependent claims 12-14, 16, 40, 41, 53, 54, and 62).

(d) Vaishnavi does not anticipate Appellant's claimed number of consecutive polls (independent claim 59 and dependent claim 16).

(e) Vaishnavi does not anticipate Appellant's claimed distributed polling gateway that filters data or that only communicates data satisfying a state model (dependent claims 6, 7, 38, 39, and 52).

(f) Vaishnavi does not anticipate Appellant's claimed user-defined equations (dependent claim 11).

(g) Vaishnavi does not anticipate Appellant's claimed user-defined transition actions, user-defined pattern of states, user-defined event, or user-defined activation condition (dependent claims 15, 17, 18, 21, 28-30, 42, 43, 46, 55, 57, 62).

(h) Vaishnavi does not anticipate Appellant's claimed poll service that is for a particular type of network element (dependent claim 31).

(i) Vaishnavi does not anticipate dependent claims 2-5, 8-10, 19, 23-25, 27, 34, 37, 44, 45, 50, and 56 because they depend upon allowable independent claims.

## VII. ARGUMENT

It is submitted that the reference, Vaishnavi, does not teach or disclose the invention as required by claims 1-35 and 37-64 because (a) it is well-known in the law that, under 35 U.S.C. § 102, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (CAFC, 1987), M.P.E.P. § 2131, and, (b) as provided by the remarks set forth below, this is clearly not the case with the present rejection of the claims under 35 U.S.C. § 102. Further, Appellant asserts that a rejection under 35 U.S.C. § 103 would be inappropriate as well.

***(a) Vaishnavi does not anticipate Appellant's claimed user interface, input from a user, or user-defined state model (independent claims 1, 35, and 59 and dependent claim 24).***

The Examiner states that Vaishnavi discloses the step of presenting a user interface (independent claim 1), receiving input from a user (independent claim 35), executing a user-defined state model (independent claim 59), and a graphical user interface (dependent claim 24) in passages from Vaishnavi as follows: col. 4, lines 28-40, col. 5, lines 3-16 and 43-56, and col. 6, lines 26-42.

It is submitted that Vaishnavi does not anticipate Appellant's claimed user interface (independent claim 35), input from a user (independent claim 1), user-defined state model (independent claim 59), or graphical user interface (dependent claim 24) because Vaishnavi's general purpose computer that includes a CPU, random access memory, and program memory via a data bus (Vaishnavi, col. 4, lines 34-41, FIG. 7) is not described to include a keyboard, monitor, mouse, or any such user interface mechanism that would be required to perform Appellant's claimed user interface. Further, nowhere does Vaishnavi disclose any occasion in which a user interface would be presented to a user. Nor is user input needed to define the parameters and structures of Vaishnavi because Vaishnavi's system is fully automated: a device status is determined, device data are collected, a new device status is determined, and an action is taken with respect to the device all automatically (Vaishnavi, FIG. 3). Vaishnavi does not state how the plurality of states listed in Vaishnavi, col. 6, lines 34-37, become a part of the system, and Vaishnavi makes no provision whatsoever for a user interface of any kind, including a graphical user interface, but instead has automated features of the system so that user input is not required. For example, Vaishnavi states that a network manager includes the synchronization module which is implemented as software (Vaishnavi, col. 4, lines 29-30), and that the network manager updates or initializes a device model (Vaishnavi, col. 2, lines 5-7), which together indicate that the network manager is software code that proceeds automatically without the need of user input such as Appellant has claimed, and described in Appellant's Specification in terms of a graphical user interface (Appellant's Specification, page 14, line 5), and depicted in Appellant's Specification in FIGs. 9A-9E and 11A. For these reasons, it is submitted that Vaishnavi cannot anticipate Appellant's independent claims 1, 35, and 59, nor dependent claim 24. It is further submitted that Vaishnavi cannot anticipate Appellant's dependent claims 2-21, 23-25, 27-34, 37-45, 47, and 60-62 at least because of their dependence on independent claims 1, 35, and 59.

***(b) Vaishnavi does not anticipate Appellant's claimed dynamic definition of a poll service or a state model during runtime (independent claims 48 and 64, and dependent claims 32, 33, 49, 51, and 61).***

The Examiner states that Vaishnavi discloses dynamic definition of a poll service or a state model at runtime (independent claims 48 and 64, and dependent claims 32 and 33) by a user (dependent claims 32, 33, 49, 51, and 61) in passages from Vaishnavi as follows: col. 4, lines 5-22 and col. 6, lines 26-42.

In rebuttal to the above, it is submitted that Vaishnavi does not anticipate Appellant's claimed dynamic definition of a poll service at runtime because Vaishnavi's system of choosing polling as a possible action (Vaishnavi, FIG. 4, ref. # 46) in no way involves the action of *defining*, but instead simply involves *using* a poll service. On the contrary, Appellant describes defining a poll service to include such options as decreasing the polling interval to 50% of default (Appellant's Specification, page 24, lines 4-5, FIG. 3A, ref. # 302). Further, Vaishnavi does not disclose dynamic definition of a poll service during runtime by a user nor a method by which this could be done. On the contrary, Appellant describes a graphical user interface in Appellant's FIG. 9A that enables the dynamic definition of poll service by a user during runtime.

In further rebuttal to the above, Vaishnavi does not anticipate Appellant's claimed dynamic definition of a state model at runtime by a user because Vaishnavi's device model creation happens when the network manager 11 is presented with a new device (Vaishnavi, col. 8, lines 15-17), and, as stated previously, the network manager is a software program, not a "user" requiring a graphical user interface as shown in Appellant's FIGs. 9B and 9C which enable Appellant's claimed dynamic definition of a state model at runtime by a user.

For these reasons, Vaishnavi cannot anticipate Appellant's claimed dynamic definition of a polling service or state model at runtime by a user.

***(c) Vaishnavi does not anticipate Appellant's claimed user-defined state transition conditions (independent claim 59 and dependent claims 12-14, 16, 18, 40, 41, 43, 53, 54, and 62).***

The Examiner states that Vaishnavi discloses that at least one user-defined state transition conditions (independent claim 59 and dependent claims 12-14, 16, 40, 41, 53, 54, and 62) that specify when a transition from one of said plurality of states to another of said

plurality of states occurs (dependent claims 18 and 43) in passages from Vaishnavi as follows: col. 4, lines 5-22, 28-40, col. 5, lines 3-16, and col. 6, lines 26-42.

In rebuttal to the above, it is submitted that Vaishnavi does not anticipate Appellant's claimed user-defined state transition conditions that specify when a transition from one of said plurality of states to another of said plurality of states occurs because (1) Vaishnavi, as stated previously, does not disclose any user definition or graphical user interface, and (2) Vaishnavi simply states an action to take upon a state transition, but no further check is made, such as a check of Appellant's claimed transition condition. For example, in Vaishnavi's system, if a device transitions from previous state "initialized" to current device information "contact established", Vaishnavi states the action to be taken of disabling the device model (Vaishnavi, FIG. 6), but nowhere does Vaishnavi test Appellant's claimed transition condition. For example, if the condition under which the transition from "initialized" to "contact established" is pre-determined to be a particular number of consecutive polls and that condition is not satisfied, Appellant claims the state of the network element remains unchanged, whereas Vaishnavi does not disclose such a test and performs the specified action ("disable device model") under any transition conditions. For these reasons, it is submitted that Vaishnavi does not anticipate Appellants independent claim 59 and dependent claims 12-14, 16, 18, 40, 41, 43, 53, 54, and 62.

***(d) Vaishnavi does not anticipate Appellant's claimed number of consecutive polls (independent claim 59 and dependent claims 16).***

The Examiner states that Vaishnavi discloses a user-defined number of consecutive polls (independent claim 59 and dependent claim 16) in passages from Vaishnavi as follows: col. 4, lines 5-22 and col. 5, lines 3-16.

In rebuttal to the above, as previously stated, it is submitted that Vaishnavi does not anticipate Appellant's claimed user-defined number of consecutive polls because, as stated previously, there is no mechanism in Vaishnavi for user definition, and because Vaishnavi's polling is time interval based (Vaishnavi, col. 5, lines 8-11), and not based on Appellant's claimed number of consecutive polls. Further, Vaishnavi's polling manager does not track Appellant's claimed number of consecutive polls that have been sent to a device, but instead predicates polling on information received from the device being polled, for example, "the polling manager may determine that a predetermined amount of time has passed without

receiving a response to a particular poll request 24, which is indicative of a ‘contact lost’ (CL) event” (Vaishnavi, col. 5, lines 17-22). Vaishnavi does not anticipate Appellant’s claimed user-defined number of consecutive polls because Vaishnavi does not maintain a parameter that counts the number of consecutive polls, nor does Vaishnavi provide a mechanism for a user to change the number of consecutive polls. Since Vaishnavi does not anticipate user definition and since Vaishnavi does not anticipate a number of consecutive polls, it is submitted that Vaishnavi cannot anticipate Appellant’s claims 16 and 59.

***(e) Vaishnavi does not anticipate Appellant’s claimed distributed polling gateway that filters data or that only communicates data satisfying a state model (dependent claims 6, 7, 38, 39, and 52).***

The Examiner states that Vaishnavi discloses that at least one distributed polling gateway filters data (dependent claims 6 and 38) or only communicates data satisfying at least one state model (dependent claims 7, 39, and 52) in passages from Vaishnavi as follows: col. 6, lines 9-20 and col. 6, lines 26-42.

In rebuttal to the above, it is submitted that Vaishnavi does not anticipate Appellant’s claimed filtering or only communicating data satisfying a state model because Vaishnavi is performing *mapping*, not *filtering*. According to the *Microsoft Computer Dictionary, Fifth Edition*, Microsoft Press, 2002, pages 213-214, definition #3, filtering is “a pattern or mask through which data is passed to weed out specified items... a filter used in e-mail or in retrieving newsgroup messages can allow users to filter out messages from other groups.” On the contrary, mapping is defined as translating one value into another (*Ibid.*, page 328, definition #2). Mapping and filtering are clearly different actions. In Vaishnavi, received status information maps directly into “appropriate messages” (Vaishnavi, col. 6, line 18) which map directly into events to be initiated (Vaishnavi, col. 6, line 19). Appellant, on the contrary, claims filtering data, and describes gateways that act as filters by only communicating necessary data about the network elements back to the central management system, thereby alleviating much of the processing and communication traffic burden from the central management system (Appellant’s Specification, page 26, lines 9-11).

Further, Vaishnavi does not anticipate Appellant’s claimed only communicating data satisfying at least one state model for the same reasons as above. Vaishnavi’s mapping system communicates all data, transformed from “status information” into “appropriate

messages” (Vaishnavi, col. 6, lines 12-18), and Vaishnavi does not disclose any data selectivity.

For these reasons, it is submitted that Vaishnavi does not anticipate Appellant’s claims 6, 7, 39, 39, and 52.

***(f) Vaishnavi does not anticipate Appellant’s claimed user-defined equations (dependent claim 11).***

The Examiner states that Vaishnavi discloses that at least one distributed polling gateway executes software to evaluate one or more user-defined equations (dependent claim 11) in passages from Vaishnavi as follows: col. 4, lines 5-22 and col. 5, lines 3-16.

In rebuttal to the above, it is submitted that Vaishnavi does not anticipate Appellant’s claimed user-defined equations because, as stated previously, (1) Vaishnavi discloses no means for user definition of anything, including Appellant’s claimed user-defined equations, and because (2) Vaishnavi does not disclose equations. With respect to (1), Vaishnavi presents no way whatsoever for a user to define equations, for example, by a graphical user interface such as Appellant presents in Appellant’s Specification, FIG. 9C. Further, and with respect to (2), Vaishnavi does not disclose equations or any type of mathematical computation whatsoever. An equation is defined as a mathematical statement that indicates equality between two expressions (*Microsoft Computer Dictionary, Fifth Edition*, page 196), where an expression is defined as a combination of symbols that yields a result upon evaluation (*Ibid.*, page 202). Vaishnavi discloses no such symbols that could be considered expression, nor any numeric values that could be evaluated, because Vaishnavi’s values such as device states or device information are simply text strings (Vaishnavi, FIG. 6). For these reasons, it is submitted that Vaishnavi does not anticipate Appellant’s dependent claim 11.

***(g) Vaishnavi does not anticipate Appellant’s claimed user-defined transition actions, user-defined pattern of states, user-defined event, or user-defined activation condition (dependent claims 15, 17, 18, 21, 28-30, 42, 43, 46, 55, 57, 62).***

The Examiner states that Vaishnavi discloses one or more user-defined transition actions, user-defined pattern of states, user-defined event, user-defined activation condition, and providing a user interface that allows a user to defined at least one transition action (dependent claims 15, 17, 18, 21, 28-30, 42, 43, 46, 55, 57, 62) in passages from Vaishnavi as follows: col. 4, lines 28-40, col. 5, lines 3-16, col. 6, lines 26-42, and col. 7, lines 9-16.

In rebuttal to the above, it is submitted that Vaishnavi does not anticipate Appellant's claimed user-defined transition actions, user-defined pattern of states, user-defined events, and user interface to define the transition actions because, as stated previously with respect to claims 1, 35, and 59, Vaishnavi discloses no means whatsoever to enter user information, nor any graphical user interface screens such as, for example, Appellant's FIG. 9E, by which a user might define a transition action, or Appellant's FIG. 11A, by which a user might define a pattern of states. Further, it is nowhere described in Vaishnavi how the entries in the table presented in Vaishnavi, FIG. 6, come to be part of the system. No graphical user interface examples are presented and/or described, and no hardware to facilitate user entry such as a mouse, a keyboard, or a display, is disclosed. For these reasons, Vaishnavi cannot anticipate Appellant's claimed user-defined transition actions, user-defined pattern of states, user-defined event, user-defined activation condition, nor user interface to define the transition actions.

***(h) Vaishnavi does not anticipate Appellant's claimed poll service that is for a particular type of network element (dependent claim 31).***

The Examiner states that Vaishnavi discloses that a poll service is for a particular type of network element (dependent claim 31) in a passage from Vaishnavi as follows: col. 5, lines 23-42.

In rebuttal to the above, it is submitted that Vaishnavi does not anticipate Appellant's claimed poll service that is for a particular type of network element because Vaishnavi does not disclose more than one poll manager which sends a single type of poll request to all devices. Vaishnavi states that "when the network manager 11 is presented with a new device, it creates a device model 210 for that device . . . and also registers the device with the polling mechanism 23 so it can appropriately monitor the device (Vaishnavi, col. 8, lines 16-23). Nowhere does Vaishnavi differentiate between types of devices when registering the device with the polling mechanism, nor when polling the device, e.g. Vaishnavi depicts a table in FIG. 6 of device states and actions without reference to any particular type of device. Appellants, on the contrary, describe the claimed poll service that is for a particular type of network element as follows: "a user may define one or more polling service conditions that the polling gateways will utilize to determine whether a particular polling service should be executed. For example, a user may specify that a polling service is to be executed only for a

particular type of network elements (e.g., routers). The polling service may then be distributed to all polling gateways, and only those for which the defined polling service condition is satisfied will execute the polling service” (Appellant’s Specification, page 14, lines 21-26). Clearly Appellant’s claimed poll service that is for a particular type of network element is not anticipated by Vaishnavi’s polling manager and poll request that are generic across devices.

***(i) Vaishnavi does not anticipate dependent claims 2-5, 8-10, 19, 23-25, 27, 34, 37, 44, 45, 50, and 56 because they depend upon allowable independent claims.***

It is submitted that dependent claims 2-5, 8-10, 19, 20, 23-25, 27, 34, 37, 44, 45, 50, and 56 are patentable at least by virtue of their dependence upon allowable independent claims 1, 35, and 48.

## **VIII. CONCLUSION**

It is quite clear from the arguments presented above that claims 1-21, 23-25, 27-35, 37-46, 48-57, 59-62, and 64 are not anticipated by Vaishnavi, therefore completely negating the 35 U.S.C. §102 rejections applied thereto. Objected to dependent claims 22, 26, 47, 58, and 63 are clearly not anticipated by Vaishnavi, as these claims have been found to contain allowable subject matter. It is further noted that Vaishnavi contains no teaching or disclosure that would permit a rejection of claims 1-21, 23-25, 27-35, 37-46, 48-57, 59-62, and 64 under 35 U.S.C. § 103, including dependent claims 22, 26, 47, 58, and 63 which contain allowable subject matter.

In view of the law and facts stated herein, Appellant respectfully submits that Vaishnavi does not anticipate claims 1-21, 23-25, 27-35, 37-46, 48-57, 59-62, and 64. Appellant further respectfully submits that a rejection under 35 U.S.C. § 103 would also fail, even though such a rejection has not been applied. Appellant respectfully urges that the rejection of claims 1-21, 23-25, 27-35, 37-46, 48-57, 59-62, and 64 under 35 U.S.C. § 102(e) is improper. Reversal of the rejections in this appeal is respectfully requested.

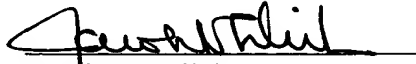


In accordance with M.P.E.P. § 714.01, the following information is presented in the event that a call may be deemed desirable by the Examiner:

JACOB N. ERLICH (617) 345-3000

Dated: November 13, 2006

Respectfully submitted  
on behalf of Appellant,  
Semih Secer

By:   
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## **IX. CLAIMS APPENDIX**

### **Listing of claims**

Claim 1: (PREVIOUSLY PRESENTED) A method for implementing a state model for managing a network coupled to a central management system, said method comprising:

presenting a user interface for said central management system to enable a user to define at least one state model for managing said at least one network element based on a determined state of said at least one network element;

presenting a user interface for said central management system to enable a user to define at least one poll service that includes at least one of said at least one state model; and  
executing said at least one poll service to manage said at least one network element.

Claim 2: (PREVIOUSLY PRESENTED) The method of claim 1 further comprising the steps of:

distributing said at least one poll service to at least one distributed polling gateway that is communicatively coupled with said at least one network element; and

communicatively coupling said user interface to said at least one distributed polling gateway.

Claim 3: (PREVIOUSLY PRESENTED) The method of claim 1 further comprising:

distributing said at least one poll service defined by said user to at least one distributed polling gateway for execution thereon.

Claim 4: (PREVIOUSLY PRESENTED) The method of claim 1 further comprising:

distributing said at least one poll service defined by said user to a plurality of distributed polling gateways for execution thereon.

Claim 5: (PREVIOUSLY PRESENTED) The method of claim 4 wherein said plurality of distributed polling gateways each have the ability to communicate with one or more network elements in a particular one of communication protocols selected from the group consisting of: SNMP protocol and CMIP protocol.

Claim 6: (ORIGINAL) The method of claim 3 wherein said at least one distributed polling gateway filters data for said central management system.

Claim 7: (ORIGINAL) The method of claim 6 wherein said at least one distributed polling gateway only communicates data satisfying said at least one state model to said central management system.

Claim 8: (ORIGINAL) The method of claim 3 wherein said at least one distributed polling gateway executes software to evaluate a user-defined state model condition to determine whether to execute each of said at least one state model.

Claim 9: (ORIGINAL) The method of claim 8 wherein said state model condition specifies that said at least one state model is to be executed only for particular network elements.

Claim 10: (ORIGINAL) The method of claim 3 wherein said at least one distributed polling gateway operates to retrieve from said at least one network element needed values for values defined for said at least one state model.

Claim 11: (ORIGINAL) The method of claim 10 wherein said at least one distributed polling gateway executes software to evaluate one or more user-defined equations for said at least one state model utilizing the retrieved variable values.

Claim 12: (ORIGINAL) The method of claim 3 wherein said at least one distributed polling gateway executes software to evaluate one or more user-defined state transition conditions for said at least one state model to determine whether said one or more user-defined state transition conditions are satisfied.

Claim 13: (ORIGINAL) The method of claim 12 wherein if said at least one distributed polling gateway determines that said one or more user-defined state transition conditions are not satisfied, then the state of said at least one network element remains unchanged.

Claim 14: (ORIGINAL) The method of claim 12 wherein if said at least one distributed polling gateway determines that said one or more user-defined state transition conditions are satisfied, then a state transition for said at least one network element is triggered.

Claim 15: (ORIGINAL) The method of claim 14 wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition.

Claim 16: (ORIGINAL) The method of claim 12 wherein if said at least one distributed polling gateway determines that said one or more user-defined state transition conditions are satisfied in a user-defined number of consecutive polls of said at least one network element, then a state transition for said at least one network element is triggered.

Claim 17: (ORIGINAL) The method of claim 16 wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition.

Claim 18: (PREVIOUSLY PRESENTED) The method of claim 1 wherein said presenting a user interface on a management system to enable a user to define at least one state model, further comprises:

- providing a user interface that allows a user to define a plurality of states within a state model for a network element;

- providing a user interface that allows a user to define at least one transition condition that specifies when a transition from one of said plurality of states to another of said plurality of states is to occur; and

- providing a user interface that allows a user to define at least one transition action to be performed upon the occurrence of said transition.

Claim 19: (PREVIOUSLY PRESENTED) The method of claim 1 further comprising:

- correlating various different models of said at least one state model.

Claim 20: (PREVIOUSLY PRESENTED) The method of claim 19 wherein software code executes on said at least one distributed polling gateway communicatively coupled to said central management system to perform said step of correlating.

Claim 21: (PREVIOUSLY PRESENTED) The method of claim 20 wherein said software code triggers an action based upon a user-defined pattern of states of said various different models being achieved.

Claim 22: (PREVIOUSLY PRESENTED) The method of claim 21 wherein said action includes any one or more selected from the group consisting of:

generating a user alert, clearing said user alert, starting particular services for said at least one network element, stopping said particular services for said at least one network element, changing the interval utilized to poll said at least one network element, enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, triggering one or more user-defined commands to be executed, triggering communication of an email message to personnel, triggering a page of personnel, logging achievement of said pattern of states to a file, and performing network element configuration.

Claim 23: (PREVIOUSLY PRESENTED) The method of claim 1 wherein said at least one network element is selected from the group consisting of:

ATM, Sonet, router, modem, CMIP EMS, switch, OSS, NMS, and web server.

Claim 24: (ORIGINAL) The method of claim 1 wherein said user interface is a graphical user interface.

Claim 25: (PREVIOUSLY PRESENTED) The method of claim 1 wherein said at least one state model includes:

software code specifying at least two user-defined states for said at least one network element;

software code specifying at least one transition from a first of said at least two user-defined states to a second of said at least two user-defined states; and

software code specifying at least one transition action to be performed upon the occurrence of said at least one transition.

Claim 26: (PREVIOUSLY PRESENTED) The method of claim 25 wherein said transition action includes any one or more selected from the group consisting of:

generating a user alert, clearing said user alert, starting particular services for said at least one network element, stopping said particular services for said at least one network element, changing the interval utilized to poll said at least one network element, enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, triggering one or more user-defined commands to be executed, triggering communication of an email message to personnel, triggering a page of personnel, logging achievement of said pattern of states to a file, and performing network element configuration.

Claim 27: (PREVIOUSLY PRESENTED) The method of claim 25 wherein said transition action includes any one or more selected from the group consisting of:

enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, and triggering one or more user-defined commands to be executed.

Claim 28: (PREVIOUSLY PRESENTED) The method of claim 1 wherein said executing said at least one poll service further includes:

triggering execution of said at least one poll service in response to the occurrence of a user-defined event.

Claim 29: (ORIGINAL) The method of claim 28 wherein said user-defined event includes a particular fault condition defined by a user.

Claim 30: (ORIGINAL) The method of claim 1 wherein said at least one poll service is executed only if a user-defined activation condition for said at least one poll service is satisfied.

Claim 31: (ORIGINAL) The method of claim 30 wherein said user-defined activation condition specifies that said poll service is for a particular type of network element.

Claim 32: (PREVIOUSLY PRESENTED) The method of claim 1 wherein said central management system enables a user to dynamically define said at least one poll service during runtime.

Claim 33: (PREVIOUSLY PRESENTED) The method of claim 1 wherein said central management system enables a user to dynamically define said at least one state model during runtime.

Claim 34: (PREVIOUSLY PRESENTED) The method of claim 1 wherein said central management system enables a user to dynamically modify an existing poll service or state model during runtime.

Claim 35: (PREVIOUSLY PRESENTED) A method for enabling state-based management of a network, wherein network elements are managed based on their state, said method comprising:

- receiving input from a user at a management system to define at least one state model for managing at least one network element based on a determined state of said at least one network element;

- receiving input from a user at said management system to define at least one poll service that includes at least one of said at least one state model;

- distributing said at least one poll service including said at least one state model to at least one distributed polling gateway that is communicatively coupled with said at least one network element; and

- executing said at least one poll service at said at least one distributed polling gateway to manage said at least one network element,

- wherein said management system is a central management system that is communicatively coupled to said at least one distributed polling gateway.

Claim 36: (CANCELED)

Claim 37: (PREVIOUSLY PRESENTED) The method of claim 35 further comprising:

distributing said at least one poll service defined by said user to said at least one distributed polling gateway for execution thereon.

Claim 38: (ORIGINAL) The method of claim 37 wherein said at least one distributed polling gateway filters data for said central management system.

Claim 39: (ORIGINAL) The method of claim 38 wherein said at least one distributed polling gateway only communicates data satisfying said at least one state model to said central management system.

Claim 40: (ORIGINAL) The method of claim 37 wherein said at least one distributed polling gateway executes software to evaluate one or more user-defined state transition conditions for said at least one state model to determine whether said one or more user-defined state transition conditions are satisfied.

Claim 41: (ORIGINAL) The method of claim 40 wherein if said at least one distributed polling gateway determines that said one or more user-defined state transition conditions are satisfied, then a state transition for said at least one network element is triggered.

Claim 42: (ORIGINAL) The method of claim 41 wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition.

Claim 43: (PREVIOUSLY PRESENTED) The method of claim 35 wherein said received input from said user to define said at least one state model comprises:

input to define a plurality of states within a state model for a network element;  
input to define at least one transition condition that specifies when a transition from one state to another state is to occur; and  
input to define at least one transition action to be performed upon the occurrence of said at least one transition.



Claim 44: (PREVIOUSLY PRESENTED) The method of claim 35 further comprising:  
correlating various models from said at least one state model.

Claim 45: (PREVIOUSLY PRESENTED) The method of claim 44 wherein software code executes on said at least one distributed polling gateway communicatively coupled to said central management system to perform said step of correlating.

Claim 46: (PREVIOUSLY PRESENTED) The method of claim 45 wherein said software code triggers an action based upon a user-defined pattern of states of said various models being achieved.

Claim 47: (PREVIOUSLY PRESENTED) The method of claim 46 wherein said action includes any one or more selected from the group consisting of:

generating a user alert, clearing said user alert, starting particular services for said at least one network element, stopping said particular services for said at least one network element, changing the interval utilized to poll said at least one network element, enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, triggering one or more user-defined commands to be executed, triggering communication of an email message to personnel, triggering a page of personnel, logging achievement of said pattern of states to a file, and performing network element configuration.

Claim 48: (PREVIOUSLY PRESENTED) A system for managing network elements based on their state, said system comprising:

at least one network element;

one or more distributed gateways for monitoring said at least one network element, said one or more distributed gateways communicatively coupled to a central management system between said at least one network element and said central management system; and

at least one state model executing on said one or more distributed gateways for managing said at least one network element based on a determined state of said at least one

network element, said at least one state model capable of being dynamically defined during runtime.

Claim 49: (ORIGINAL) The system of claim 48 further comprising:

software executing on said central management system to enable a user to define said at least one state model, wherein once a user defines said at least one state model, it is communicated to said one or more distributed gateways for execution thereon.

Claim 50: (PREVIOUSLY PRESENTED) The system of claim 48 wherein said one or more distributed gateways further include at least one user-defined poll service that includes one or more of said at least one state model.

Claim 51: (ORIGINAL) The system of claim 50 further comprising:

software executing on said central management system to enable a user to define said at least one poll service, wherein once a user defines said at least one poll service, it is communicated to said one or more distributed gateways for execution thereon.

Claim 52: (ORIGINAL) The system of claim 48 wherein said one or more distributed polling gateways only communicate data satisfying said at least one state model to said central management system.

Claim 53: (ORIGINAL) The system of claim 48 wherein said one or more distributed polling gateways execute software to evaluate one or more user-defined state transition conditions for said at least one state model to determine whether said one or more user-defined state transition conditions are satisfied.

Claim 54: (ORIGINAL) The system of claim 53 wherein if said one or more distributed polling gateways determine that said one or more user-defined state transition conditions are satisfied, then a state transition for said at least one network element is triggered.

Claim 55: (ORIGINAL) The system of claim 54 wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition.

Claim 56: (PREVIOUSLY PRESENTED) The system of claim 48 wherein said one or more distributed polling gateways further comprises:

at least one pattern-based state model executing thereon to correlate various of said at least one state model.

Claim 57: (PREVIOUSLY PRESENTED) The system of claim 56 wherein said at least one pattern-based state model specifies a user-defined pattern of states of said various models, and wherein said at least one pattern-based state model triggers an action upon said user-defined pattern of states being achieved.

Claim 58: (PREVIOUSLY PRESENTED) The system of claim 57 wherein said action includes anyone or more selected from the group consisting of:

generating a user alert, clearing said user alert, starting particular services for said at least one network element, stopping said particular services for said at least one network element, changing the interval utilized to poll said at least one network element, enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, triggering one or more user-defined commands to be executed, triggering communication of an email message to personnel, triggering a page of personnel, logging achievement of said pattern of states to a file, and performing network element configuration.

Claim 59: (PREVIOUSLY PRESENTED) Method for performing state-based management of a network, wherein network elements are manageable based on their state through a central management system, said method comprising:

executing, on at least one distributed gateway located between the central management system and the network elements, at least one user-defined state model for managing at least one network element based on a determined state of said at least one network element, wherein said executing at least one user-defined state model includes polling said at least one network element for data, evaluating said data to determine whether a user-defined state transition condition is satisfied, and triggering a state transition if said user-

defined state transition condition is satisfied for a user-defined number of consecutive polls of said at least one network element.

Claim 60: (ORIGINAL) The method of claim 59 wherein said user-defined number of consecutive polls is a plurality of polls.

Claim 61: (PREVIOUSLY PRESENTED) The method of claim 59 further comprising:

software executing on said central management system to enable a user to define said at least one state model wherein once a user defines said at least one state model, it is communicated to one or more distributed gateways that are communicatively coupled to said central management system for execution on said one or more distributed gateways.

Claim 62: (ORIGINAL) The method of claim 59 wherein if said user-defined state transition condition is satisfied for a user-defined number of consecutive polls of said at least one network element, then one or more user-defined transition actions for the user defined state transition are triggered.

Claim 63: (PREVIOUSLY PRESENTED) The method of claim 62 wherein said one or more transition actions include any one or more selected from the group consisting of:

generating a user alert, clearing said user alert, starting particular services for said at least one network element, stopping said particular services for said at least one network element, changing the interval utilized to poll said at least one network element, enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, triggering one or more user-defined commands to be executed, triggering communication of an email message to personnel, triggering a page of personnel, logging achievement of said pattern of states to a file, and performing network element configuration.

Claim 64: (PREVIOUSLY PRESENTED) A system for managing at least one network element comprising:

at least one network element;

at least one gateway for monitoring said at least one network element, said at least one gateway communicatively coupled to a central management system between said at least one network element and said central management system; and

at least one state model executing on said at least one gateway for managing said at least one network element based on a determined state of said at least one network element, said at least one state model capable of being dynamically defined during runtime.

## **X. EVIDENCE APPENDIX**

Appellants herein present thirteen sheets of drawing which are referred to in the Appeal Brief:

1. Vaishnavi's FIG. 3, first cited against Appellant in the Office Action of December 16, 2005;
2. Vaishnavi's FIG. 4, first cited against Appellant in the Office Action of December 16, 2005;
3. Vaishnavi's FIG. 6, first cited against Appellant in the Office Action of December 16, 2005;
4. Vaishnavi's FIG. 7, first cited against Appellant in the Office Action of December 16, 2005;
5. Appellant's FIG. 3A, filed with Appellant's patent application on January 26, 2001;
6. Appellant's FIG. 5, filed with Appellant's patent application on January 26, 2001;
7. Appellant's FIG. 6, filed with Appellant's patent application on January 26, 2001;
8. Appellant's FIG. 8, filed with Appellant's patent application on January 26, 2001;
9. Appellant's FIGs. 9A and 9D, filed with Appellant's patent application on January 26, 2001;
10. Appellant's FIG. 9B, filed with Appellant's patent application on January 26, 2001;
11. Appellant's FIG. 9C, filed with Appellant's patent application on January 26, 2001;
12. Appellant's FIGs. 9E, filed with Appellant's patent application on January 26, 2001; and
13. Appellant's FIGs. 10 and 11A, filed with Appellant's patent application on January 26, 2001.

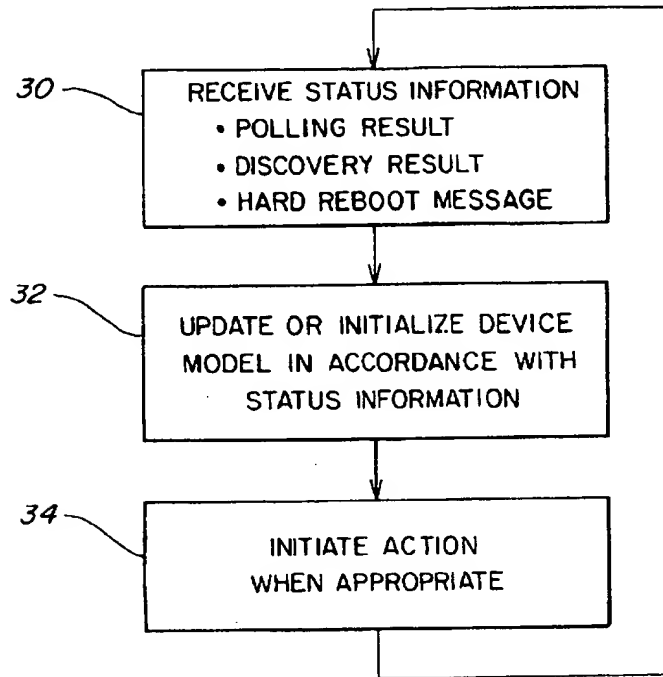
VAISHNAVI

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**FIG. 3**

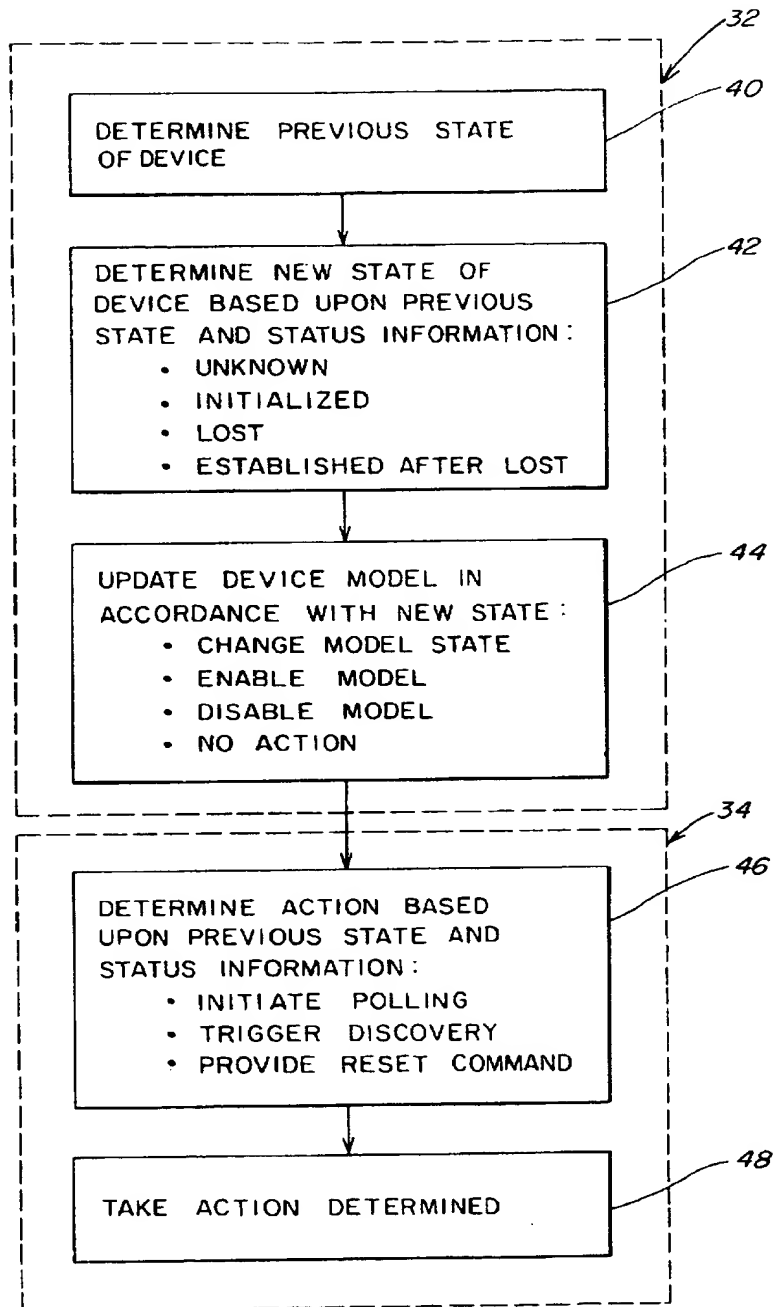


FIG. 4



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DEVICE INFORMATION	PREVIOUS DEVICE STATE			
	UNKNOWN	INITIALIZED	LOST	ESTABLISHED AFTER LOST
HARD BOOT MESSAGE (HE)	- TRIGGER DISCOVERY	- ENABLE DEVICE MODEL	- DISABLE DEVICE MODEL	- TRIGGER DISCOVERY - DISABLE DEVICE MODEL
DISCOVERY FAILURE (DF)	- TRIGGER DISCOVERY AGAIN	NO ACTION	NO ACTION	NO ACTION
DISCOVERY SUCCESSFUL (DS)	- RESET DEVICE - ENABLE DEVICE MODEL	NO ACTION	NO ACTION	- RESET DEVICE - ENABLE DEVICE MODEL
CONTACT ESTABLISHED (CE)	NO ACTION	- DISABLE DEVICE MODEL	NO ACTION	- DISABLE DEVICE MODEL
CONTACT LOST (CL)	- TRIGGER DISCOVERY AGAIN	NO ACTION	- RESET DEVICE - ENABLE DEVICE MODEL	NO ACTION

60

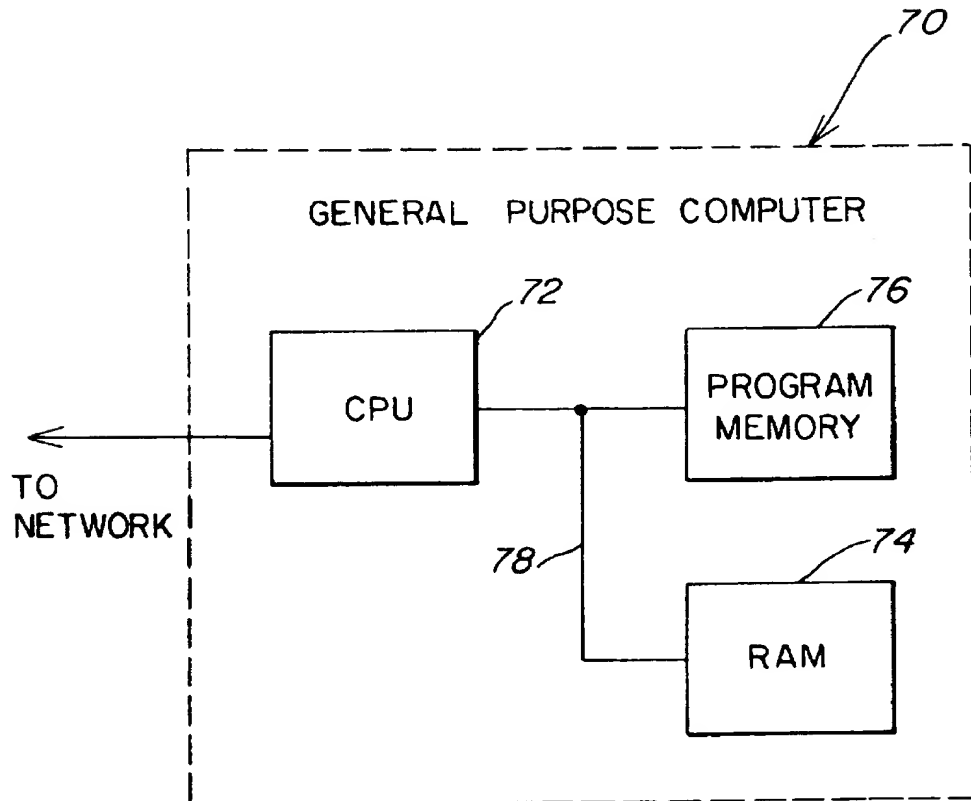
FIG. 6

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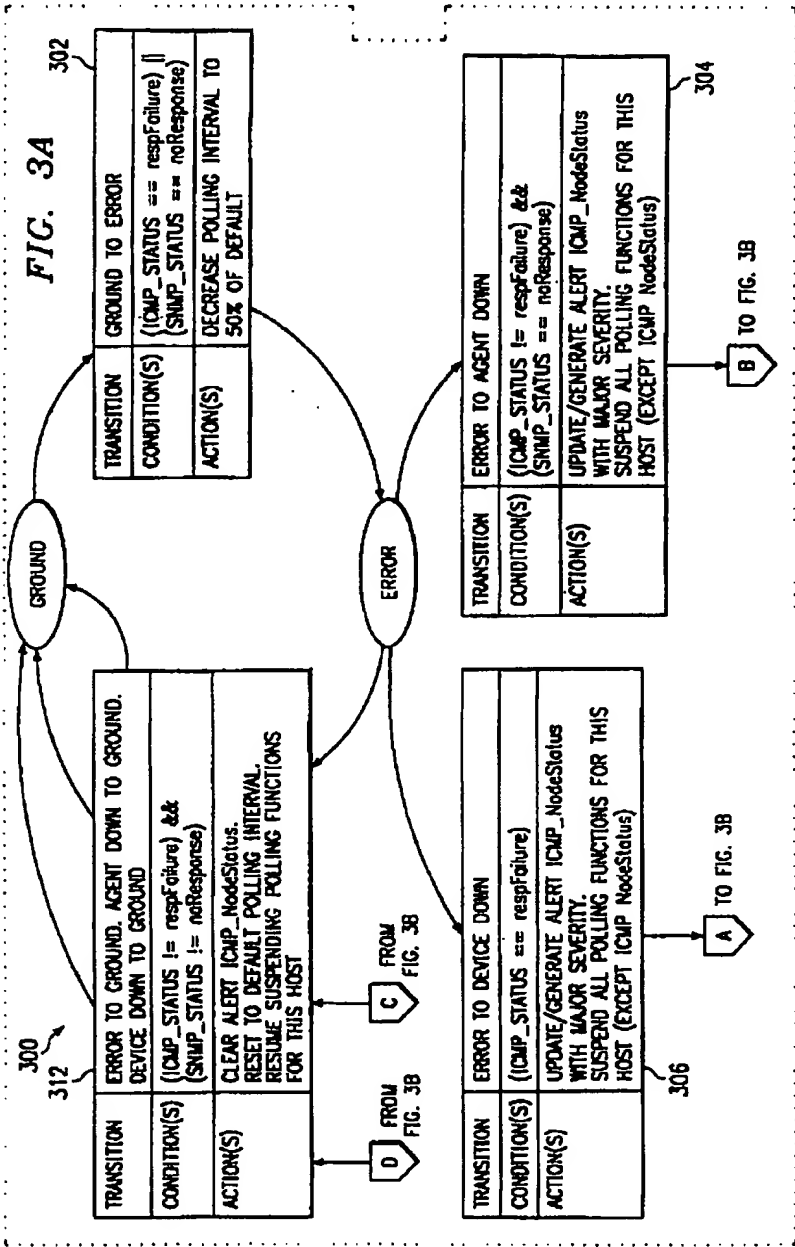
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**FIG. 7**

APPELLANT'S SPECIFICATION

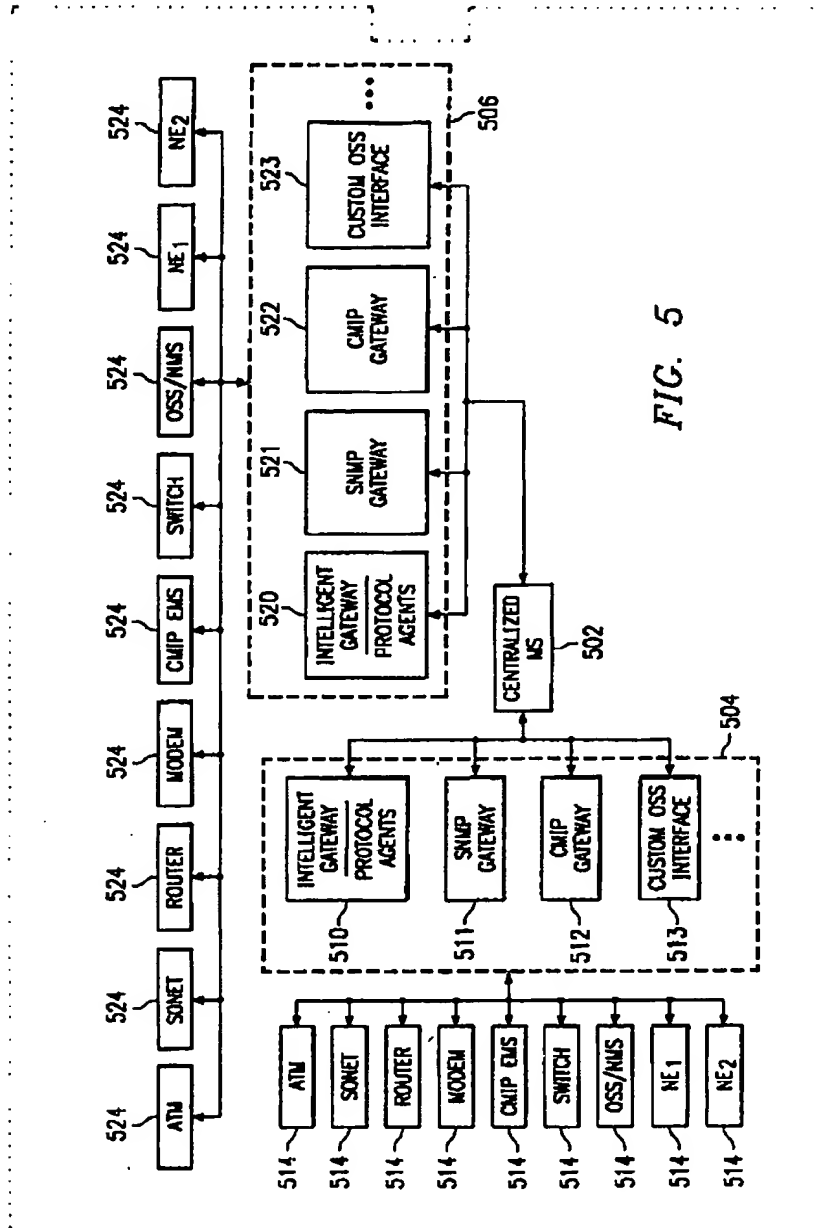
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APPELLANT'S SPECIFICATION

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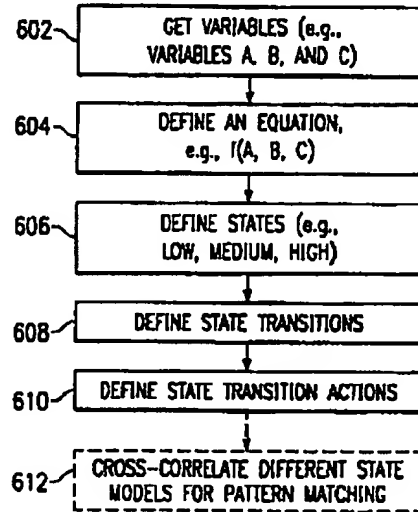


APPELLANT'S SPECIFICATION

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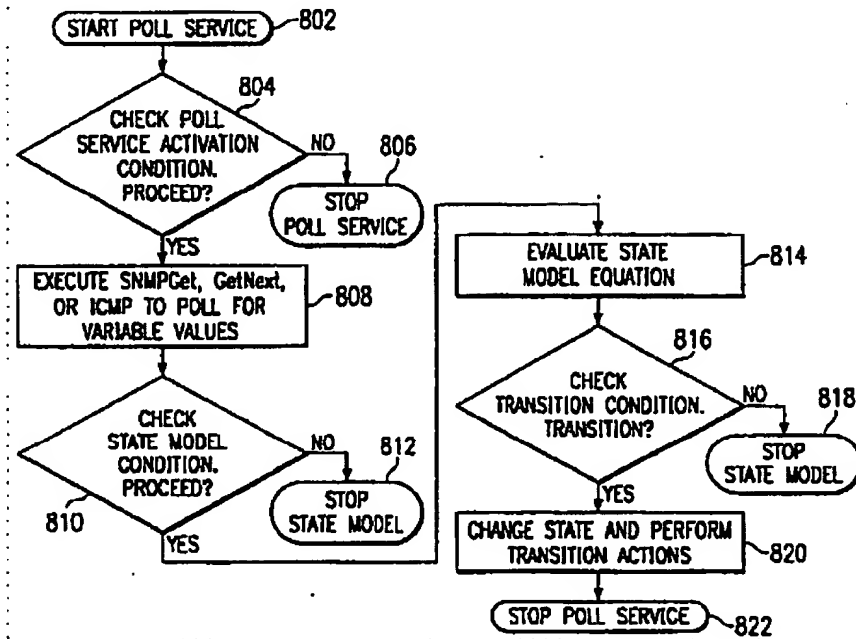
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FIG. 6



APPELLANT'S SPECIFICATION

FIG. 8



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FIG. 9A

Poll Service Properties

Poll Service: Poll Service 1

901 Poll Service 915 State Models

State Model	Wait Time	Iterations	Status
903 CPU Watch	600 sec	30	ON
904 Memory Watch	1200 sec	10	ON
905 Buffer Watch	600 sec	20	ON
906 Interface Watch	0 sec	0	OFF

902

916 Add... 907 Remove 908 Condition 909 Properties 910

911 ☒ Poll Service Active 912 OK 913 Cancel 914 Apply

FIG. 9D

Create Transition

From State: Normal To State: High

Violation Threshold

Consecutive Occurrences: 2

☐ Custom Condition

Operators

Equation Result

Variable... Delta... Match... Composite Or... True False

Condition Statement: (equation) > 85

Undo Clear

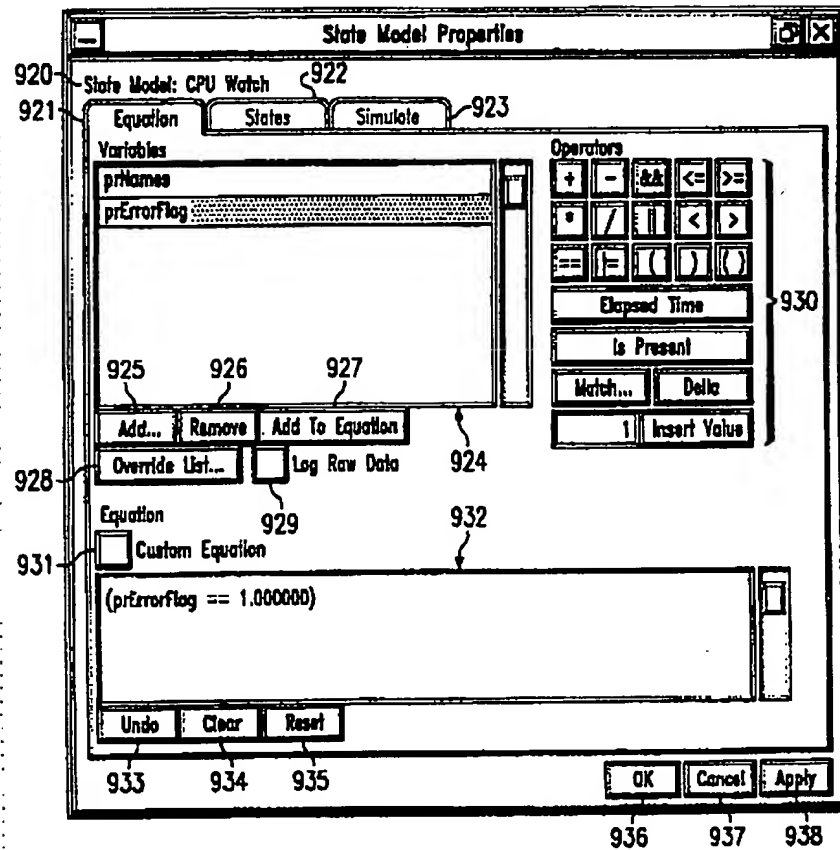
OK Cancel

APPELLANT'S SPECIFICATION

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FIG. 9B



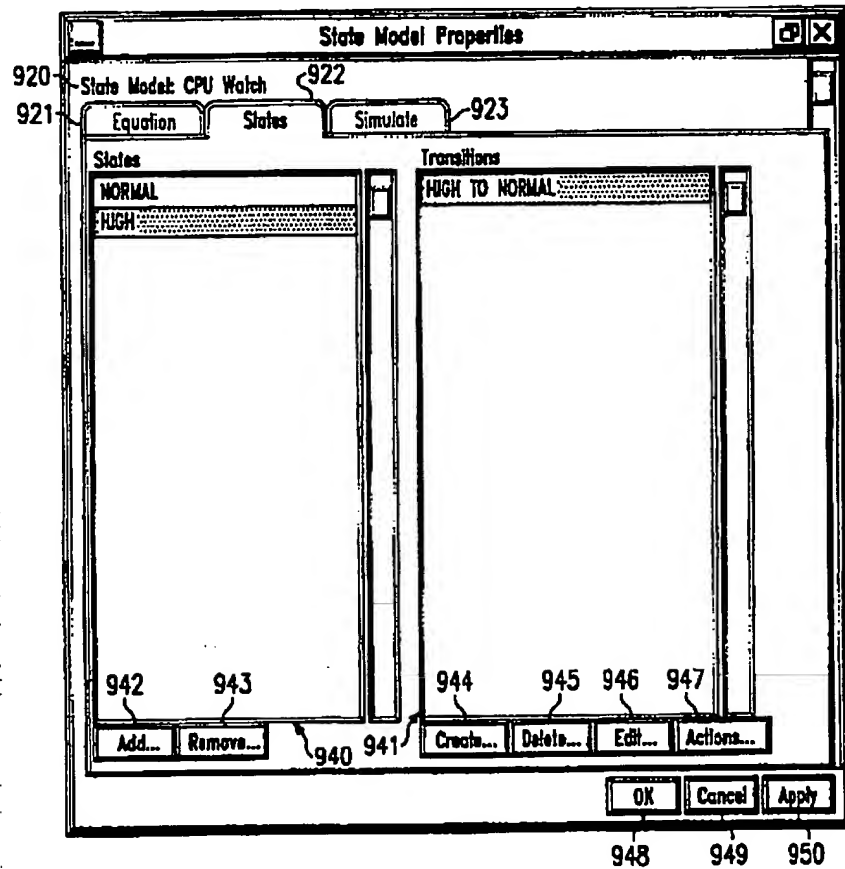


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FIG. 9C



APPELLANT'S SPECIFICATION

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FIG. 9E

970 Transition Actions

970 Transition: NORMAL TO HIGH

974 Alert Actions

974 ☒ Generate Alert 975

Alert Name: ProcessDown 976

Severity: critical V

Description: This process is down

978 ☐ Clear Alert(s) 971 977

979 Polling Actions

979 ☐ Disable State Model 980 ☐ Disable Poll Service

981 ☐ Disable All Other Poll Services ☐ Resume All Poll Services

983 ☐ Change Poll Time 982 972

984 Miscellaneous Actions

984 ☐ Update MO ☐ Log Values

986 ☐ Execute Command 985 973

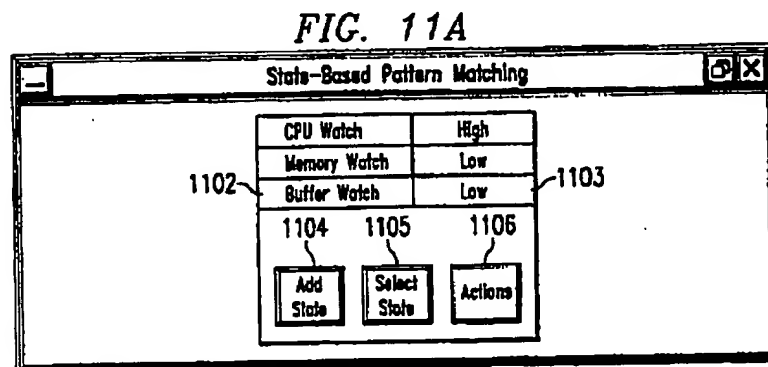
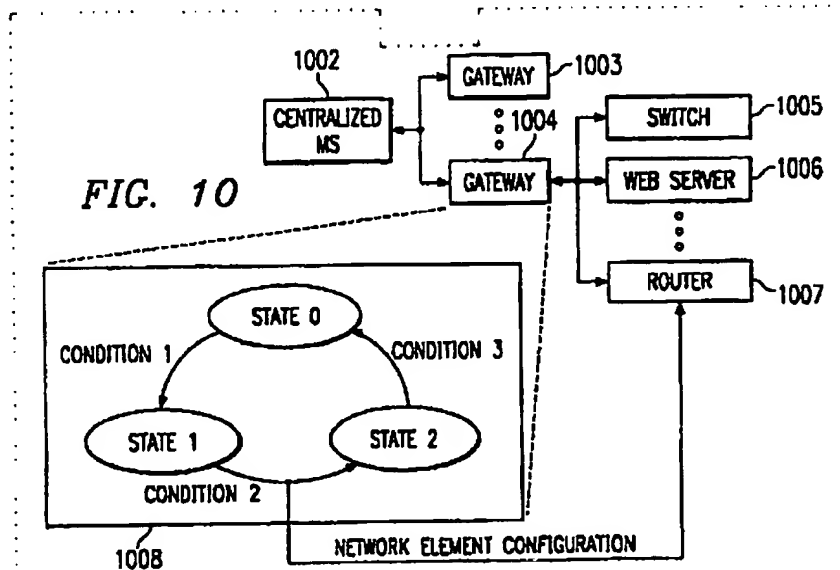
987 ☐ Custom Action

988 OK 989 Cancel

# APPELLANT'S SPECIFICATION

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Appl. Serial No.: 09/770,427

Appeal Brief Filing Date: September 29, 2006

Resubmission of Appeal Brief in response to Notification of Non-Compliant Appeal Brief dtd. 10/12/06

## **XI. RELATED PROCEEDINGS APPENDIX**

No related proceedings.

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